

**Power Electronic II**  
**2015-2016**  
**AC-AC Voltage Controllers**

<p><b>Lecture 3</b></p>	<p><b>1-ph Full Wave (2 SCRs) AC Voltage Controller with R load + waveforms + mathematical analysis [ <u>Proof: <math>V_{o(rms)}</math> and Report :Harmonics of the circuit</u> ]</b></p> <p><b>1-ph Full Wave (2 SCRs) AC Voltage Controller with RL load (inductive load) + waveforms + mathematical analysis [ <u>Proof: <math>V_{o(rms)}</math> and Report :Harmonics of the circuit</u> ]</b></p>	<p><b>Monday</b>  <b>5-9-2015</b>  <b>Dr. Khaled</b></p>
<p><b>Lecture 4</b></p>	<p><b>1-ph Half Wave (1 SCR + 1 Diode) AC Voltage Controller with R load + waveforms + mathematical analysis for each wave+ Why we use transformer between source and controller + Range of the control parameter Alpha + Disadvantages of that controller + Solved Example + state the types of controllers with suitable control method to obtain <math>V_{o(rms)} = 50\% V_{s(rms)}</math> + How to calculate transcendental equation using Calculator (How to Find Value Of Alpha)</b></p>	<p><b>Wednesday</b>  <b>7-9-2015</b>  <b>Dr. Emad</b></p>